

MOBILE PHONES AND HEALTH CONCERNS

Background

Since 1996, the Federal Communications Commission (FCC) has required that all cellular and PCS telephones sold in the United States meet minimum guidelines regarding safe human exposure to radio frequency (RF) energy emitted from these phones. In the U.S., the FCC and the Food and Drug Administration (FDA) share regulatory responsibilities for wireless phones. However, because the FCC is not a health and safety agency, it defers to other organizations and agencies, such as the FDA, to evaluate the results of biological and health studies that are necessary for determining safe levels for human exposure.

The limits for mobile phone exposure adopted by the FCC are the exposure levels recommended by two expert organizations, the Institute of Electrical and Electronics Engineers (IEEE) and the National Council on Radiation Protection and Measurements (NCRPM). The FCC also consulted with the FDA and other federal agencies with interests and responsibilities in this area, and obtained their support for the FCC's limits as being protective of public health.

The FCC's guidelines specify exposure limits for hand-held phones and similar devices in terms of the Specific Absorption Rate or "SAR." The SAR is a measure of the rate that RF energy is absorbed by the body. For exposure from mobile phones, the allowable SAR limit is 1.6 watts per kilogram (W/kg), as measured over one gram of human tissue.

There is no scientific evidence that proves that wireless phone usage can lead to cancer or a variety of other problems, including headaches, dizziness or memory loss. However, organizations in the United States and overseas are sponsoring research and investigating claims of possible health effects related to the use of wireless telephones. The Federal government is monitoring the results of this ongoing research, and the FDA is participating in an industry-funded research project to further investigate possible biological effects.

In order to provide consumers with useful information on possible health concerns relating to wireless telephone technologies, the FCC and the FDA have developed a joint Web site to provide consumers with the latest information on wireless telephone technologies, current research and related issues. Consumers can access the joint Web site through the FCC's RF Safety Web site at www.fcc.gov/oet/rfsafety for detailed information on this and other related topics. In addition, the FCC maintains a dedicated telephone line for consumer information on radiofrequency safety issues. The number is 1-202-418-2464.

Information on health-related research on mobile phones is available at the joint FCC/FDA Web site given above. In addition, the World Health Organization (WHO) has established an International Electromagnetic Field (EMF) Project to provide information on the state of knowledge in this area, to establish research needs and to promote harmonization of exposure standards for RF energy. More information is available at the WHO Web site, www.who.int/peh-emf.



All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. If wireless phones are shown to emit RF at a level that is hazardous to the user, the FDA has authority to take action. By taking action, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

The FCC does not require manufacturers to publicize the maximum SAR values for their phones. Information about SAR for cell phone models introduced in the last two years is available through the FCC Web site referenced above and from other sources. However, the FCC's position is that as long as a mobile phone complies with the FCC's limits for exposure, it is safe for consumer use.

Some studies have shown that mobile phones might interfere with implanted cardiac pacemakers if a phone is used in close proximity (within about 8 inches) of a pacemaker. Pacemaker users may want to avoid placing a phone in a pocket close to the location of their pacemaker or near the pacemaker during phone use. The joint Web site also provides further information on this topic.

In general, for more information on these topics or for information on other telecommunications-related issues, you may contact the FCC's Consumer & Governmental Affairs Bureau or Office of Engineering and Technology as follows:

Via the Internet at: www.fcc.gov/cgb or www.fcc.gov/oet/rfsafety
Telephone: 1-888-CALL-FCC (voice); 1-888-TELL-FCC (TTY)
OET RF Safety Line: 202-418-2464
Address: Federal Communications Commission
(See address below)

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For this or any other consumer publication in an accessible format (electronic ASCII text, Braille, large print, or audio) please write or call us at the address or phone number below, or send an e-mail to FCC504@fcc.gov.

To receive information on this and other FCC consumer topics through the Commission's electronic subscriber service, click on www.fcc.gov/cgb/emailservic.html.

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